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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,852	07/21/2003	Gary Wingett	884A.0015.U1(US)	1883
29683	7590	11/24/2006	EXAMINER	
HARRINGTON & SMITH, LLP			TRAN, TUYETLIEN T	
4 RESEARCH DRIVE			ART UNIT	
SHELTON, CT 06484-6212			PAPER NUMBER	

2179

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/626,852	Applicant(s) WINGETT ET AL.	
	Examiner TuyetLien (Lien) T. Tran	Art Unit 2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 8-12, 14, 15 and 18-32 is/are rejected.
- 7) ☒ Claim(s) 2, 6-7, 13, 16-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/21/03, 10/3/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This application has been examined. The original claims 1-32 are pending. The examination results are as follows.

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C 119(a)-(d). The certified copy of the priority documents has been received.

Information Disclosure Statement

2. The examiner has considered the documents listed in forms PTO-1449 submitted with the Information Disclosure Statements (IDSs) received on 7/21/2003 and 10/03/2005 (see the attached forms PTO-1449).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-5, 8-9, 11-12, 14-15, 18-19, 21-29, 31-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Bellman et al (Int'l Pub No WO 00/58816; hereinafter Bellman).

As to claims 1 and 22, Bellman teaches:

A user input device (e.g., personal electronic devices, see page 1, lines 2-3) comprising:

means for producing a highlight for highlighting any one of the icons (e.g., a component that produces a cursor-highlighted character, see page 4, lines 12-15 and Fig. 10a – Fig. 10c) in an arrangement of icons (e.g., hybrid keyboard 10 as shown in Fig. 1), the arrangement having a first portion comprising a first plurality of icons (e.g., the portion that comprises the space bar icon 18 and delete key, see Fig. 1 and page 5 lines 10-16) and a second portion comprising at least one icon (e.g., QWERTY layout 12 and dynamic region 14 as shown in Fig. 1);

a user input comprising a directional control for user actuation (e.g., arrow keys 22, 24, 26, see Fig. 2) and a selection control for user actuation (e.g., selection key 30 in Fig. 2); and

control means arranged to change the position of the highlight in response to user actuation of the directional control (e.g., see Fig. 10a – Fig. 10c and Fig. 11a – Fig. 11e and page 8 lines 18-27), to select an icon of the second portion of the arrangement in response to user actuation of the selection control when the icon is highlighted (e.g., selecting the cursor-highlighted character, see page 4, lines 12-15) and to select automatically an icon of the first portion in response to the highlighting of the icon (e.g., see page 5, lines 10-16).

As to claim 12, Bellman teaches:

A method of user input by selecting an icon from an arrangement of icons (e.g., an on-screen keyboard method of text entry, see page 4, lines 11-12), the arrangement

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(e.g., hybrid keyboard 10 as shown in Fig. 1) having a first portion comprising a first plurality of icons (e.g., the portion that comprises the space bar icon 18 and delete key, see Fig. 1 and page 5 lines 10-16) and a second portion comprising at least one icon (e.g., QWERTY layout 12 and dynamic region 14 as shown in Fig. 1), comprising the steps of:

highlighting one icon at a time (e.g., see Fig. 10a – Fig. 10c and Fig. 11a – Fig. 11e);

selecting an icon of the first portion by highlighting it (e.g., see page 5, lines 10-16); and

selecting an icon of the second portion by highlighting it and then actuating an input device (e.g., selecting the cursor-highlighted character, see page 4, lines 12-15).

As to claims 23 and 28, Bellman teaches:

A user input device (e.g., personal electronic devices, see page 1, lines 2-3) comprising:

means for producing a highlight for highlighting any one of the icons (e.g., a component that produces a cursor-highlighted character, see page 4, lines 12-15 and Fig. 10a – Fig. 10c) of an arrangement of icons (e.g., hybrid keyboard 10 as shown in Fig. 1);

a user input (e.g., see Fig. 2); and

control means arranged to select a highlighted icon (e.g., a selector arranged for selecting the cursor-highlighted character, see page 4, lines 12-15 and page 11) and to move the highlight from one icon to another in response to actuation of the user input

(e.g., see Fig. 10a – Fig. 10c and Fig. 11a – Fig. 11e) and arranged to automatically move the highlight, after selection of an icon, to a "home" icon centrally located in the arrangement of icons (e.g., after each character is entered, the cursor snaps back to the home position, see page 5 lines 4-7; note that home position 16 is centrally located in the hybrid keyboard 10, see Fig. 1 and page 4 lines 32-33).

As to claim 29, Bellman teaches:

A user input device (e.g., personal electronic devices, see page 1, lines 2-3) comprising:

- a display (e.g., a character display, see page 2, lines 27-29 and Fig. 1);
- means for producing an arrangement of icons on the display (e.g., displaying of hybrid keyboard 10 as shown in Fig. 1);
- a user input (e.g., see Fig. 2); and
- control means arranged to select an icon in response to the user input (e.g., a processor arranged for selecting the cursor-highlighted character, see page 4, lines 12-15 and page 11) and arranged to change the arrangement of icons in response to the user input (e.g., see page 5 lines 20-32 – page 6 lines 1-11).

As to claim 3, Bellman further teaches wherein the control means is arranged to change the position of the highlight from one icon to another in response to each user actuation of the directional control (e.g., see Fig. 10a – Fig. 10c and Fig. 11a – Fig. 11e and page 8 lines 18-27).

As to claims 4 and 14, Bellman further teaches wherein the control means is arranged to move the highlight, after selection of an icon, to a "home" icon of the second portion of the arrangement of icons (e.g., after each character is entered, the cursor snaps back to the home position, see page 5 lines 4-7; note that home position 16 is centrally located in the hybrid keyboard 10, see Fig. 1, Fig. 10a – Fig. 10c, and page 4 lines 32-33).

As to claims 5 and 15, Bellman further teaches wherein the arrangement of icons comprises an N row by M column array of icons (e.g., hybrid keyboard 10 as shown in Fig. 1) and the "home" icon is located in the central row(s) of the array and/or the central column(s) of the array (e.g., see Fig. 1 and page 4 lines 32-33).

As to claims 8 and 18, Bellman teaches further comprising a display for displaying the arrangement of icons and the highlight (e.g., a character display, see page 2, lines 27-29 and Fig. 1).

As to claims 9 and 19, Bellman teaches further comprising means for determining from the identity of the preceding selected icon(s) of an input sequence those icons which will not be selected for the remainder of the input sequence and removing them from the display (e.g., see page 5 lines 20-32 – page 6 lines 1-11).

As to claim 11, Bellman further teaches wherein the arrangement of icons represents a 3 column keyboard or keyboard portion or a 3 row keyboard or keyboard

portion with each icon representing a key of the keyboard or keyboard portion (e.g., see Fig. 9a – 9f in page 7).

As to claim 21, Bellman further teaches an input device is a mobile communications device (e.g., cellular telephone system, pages, and the like, see page 1 lines 2-4).

As to claim 24, Bellman further teaches wherein the "home" icon is positioned within the arrangement of icons such that the average travelling distance of the highlight for selecting the next icon is minimized (e.g., see page 4 lines 32-33 – page 5 lines 1-7 and Fig 1 portion 14).

As to claim 25, Bellman further teaches wherein the arrangement of icons comprises an N row by M column array of icons and the "home" icon is located in the central row(s) of the array and/or the central column(s) of the array (e.g., see Fig. 1 and page 4 lines 32-33).

As to claim 26, Bellman further teaches wherein the control means is arranged to select first ones of the arrangement of icons automatically when they are highlighted (e.g., see page 5, lines 10-16).

As to claim 27, Bellman further teaches wherein the control means is arranged to select highlighted icons in response to user actuation of the user input (e.g., a processor arranged for selecting the cursor-highlighted character, see page 4, lines 12-15 and page 11).

As to claim 31, Bellman further teaches wherein the arrangement of icons is a typist keyboard or a portion of a typist keyboard (e.g., hybrid keyboard 10 as shown in Fig. 1).

As to claim 32, Bellman teaches further comprising means for producing a highlight for highlighting any one of the icons in the displayed arrangement of icons (e.g., a component that produces a cursor-highlighted character, see page 4, lines 12-15 and Fig. 10a – Fig. 10c) wherein the control means is arranged to change the position of the highlight in response to the user input and wherein changing the displayed arrangement of icons is achieved by moving the highlight to a predetermined position (e.g., see Fig. 10a – Fig. 10c and Fig. 11a – Fig. 11e).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellman in view of Kozu et al (EP Pub No EP1022649 A1, hereinafter Kozu).

As to claims 10 and 20, Bellman teaches the limitation of claims 1 and 10 for the reasons as discussed with respect to claims 1 and 10 above. However, Bellman

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fails to teach means for selecting different alphanumeric characters in response to the repetitive selection of an icon a different number of times. Kozu, though, teaches means for selecting different alphanumeric characters in response to the repetitive selection of an icon a different number of times (e.g., see [0038] in page 4).

It would have been obvious to one of ordinary skill in the art, having the teachings of Bellman and Kozu before him at the time the invention was made to have utilized the method of character input as taught by Kozu to the user input device as taught by Bellman to enable efficient key input while decreasing the moving distance of the cursor between key positions and thus increase text entry speed (e.g., see Kozu [0009] in page 2).

7. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bellman in view of Schroeder et al (Patent No 5,797,098, hereinafter Schroeder).

As to claim 30, Bellman teaches the limitation of claim 29 for the reasons as discussed with respect to claim 29 above. However, Bellman does not teach the control means is arranged to scroll an arrangement of icons across the display in response to the user input. Schroeder, though, teaches wherein the control means is arranged to scroll an arrangement of icons across the display in response to the user input (e.g., see Fig. 1 and steps 208, 210 in Fig. 2).

It would have been obvious to one of ordinary skill in the art, having the teachings of Bellman and Schroeder before him at the time the invention was made to have utilized the predictive keyboard input as taught by Schroeder to the user input

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device as taught by Bellman to speed up input on a telephone with a space limited keyboard (e.g., see Schroeder Abstract).

Allowable Subject Matter

8. Claims 2, 6-7, 13, and 16-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter. The present invention is directed to a method for user input in a hand-portable device. More specifically, dependent claims 2, 6-7, 13, 16-17 identify the uniquely distinct features: selecting automatically an icon of a first portion in response to the highlighting of the icon wherein the first portion is a peripheral portion of the arrangement and the second portion is a non-peripheral portion of the arrangement; and wherein the first plurality of icons are either in the first row and last row of the array or are in the first column and last column of the array. The closest prior art, Bellman, discloses a method of automatically selecting an icon in a hybrid keyboard in response to the highlighting of the icon. However, Bellman does not teach that the automatically selected icon is from a peripheral portion and that the icons in a non-peripheral are selected by a selection control. The prior art, taken either singly or in combination, fails to anticipate or fairly suggest the limitations of applicant's dependent claims 2, 6-7, 13, 16-17, in such a manner that a rejection under 35 U.S.C 102 or 103 would be proper. The claimed invention is therefore considered to be in condition for allowance as being

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novel and nonobvious over prior art if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TuyetLien (Lien) T. Tran whose telephone number is 571-270-1033. The examiner can normally be reached on Mon-Friday: 7:30 - 5:00, off on alternating Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

T.T
11/15/2006

Lien Tran
Examiner
Art Unit 2179


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